



## MEMORANDUM

**TO:** Mayor and Council

**FROM:** Marc A. Ott, City Manager 

**CC:** Robert Goode, P.E., Assistant City Manager  
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**DATE:** March 26, 2015

**SUBJECT:** Traffic Congestion Action Plan (Traffic CAP)

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I am writing to you inform you that I'm launching an action plan that the staff and I have developed to reduce traffic congestion. This memo is intended to provide context...much of which you already know.

We continue to be one of the top destinations in the country. About 110 people move to our region every day contributing to the fact that we are now the 11<sup>th</sup> largest city in the country and the fastest growing "Big City" in America. The Downtown core is not the only area experiencing this growth; many areas of our region are growing at an astounding rate. As a result, I believe we have all experienced one of the down sides to this growth...traffic congestion. The increase in residents and guests has stressed the capacity of our existing transportation system. We've seen that stress play out every day during our morning and afternoon commutes.

Although everyone in Austin knows this anecdotally, the data highlights our current mobility challenges. For example, our vehicle miles traveled has almost quadrupled from 1980 to 2010. Our annual hours of delay associated with congestion have seen almost a twelve fold increase from 1980 to 2010. Our travel time index calculated by the Texas A&M Transportation Institute (TTI) is at 1.32 (travel time index is the ratio of congested travel time to uncongested). So, that means it takes us about 32% longer to make a trip in congested periods. That figure puts us as the 4<sup>th</sup> most congested city, with Los Angeles, New York, and Honolulu as the only communities with a higher Index.

What are we going to do about this challenge? We have taken many steps to minimize mobility impacts by working with our transportation partners across the region. For example, we have completed the interchange at MoPac and SH71, built interim improvements for the Oakhill "Y", launched the IH 35 reconstruction discussion, funded the new 51<sup>st</sup> at IH-35 interchange, and partnered on regional mobility projects (MoPac North Express Lanes, US 290 Toll Road Extension, etc.).

But we need to do more. The City Council has prioritized this issue by forming the Mobility Council Committee, chaired by Council Member Kitchen. I certainly want to support their upcoming efforts and will provide data and alternatives for some policy decisions that I will be bringing to the Mobility

Committee and ultimately the City Council for your consideration. To that end, and in the spirit of the Mayor's "let's try it" philosophy, I have developed the attached **Traffic Congestion Action Plan (Traffic CAP)**.

The Plan's goal is simple – to reduce congestion using a variety of tools (short term methods coupled with a mid- and long-term strategies). The Traffic C.A.P. utilizes many tools because there isn't a single solution to this complex issue. It focuses on improving our existing traffic system's operations by ensuring that traffic flows as smoothly as possible within the existing roadway network and traffic signal system. The plan can provide additional capacity and offers transportation alternatives.

I am scheduling a press conference this afternoon to unveil this publicly. Mainly because we will need the public to understand that we will be trying some new things that will hopefully make a positive impact, but that we will also be stepping up enforcement for "blocking the box" (blocking intersections) and for blocking a traffic lane while making a delivery during peak hours. It will also be important for the public to know that I will be launching a pilot program that will deploy a dedicated Traffic Mobility Unit coordinated through the City's Traffic Management Center (TMC) to keep key intersections clear and traffic from driveways moving. So, hopefully with good media coverage the public will understand why they are seeing police officers in critical intersections during our rush hours.

I also hope that the media coverage will help communicate a challenge to other Downtown employers in regards to providing transportation alternatives to their employees. Focusing on Travel Demand Management (TDM) techniques, we can shift many of our employee trips to off-peak times. I will be leading this effort by directing a 20% off-set in travel (especially during peak hours) for all City employees within the Downtown core – by providing employees with alternative work schedule options, encouraging the use of alternative modes and teleworking. We will ensure that customer service is not impacted negatively with these shifts.

The Austin community has a role to play, too. I want to acknowledge the initiative of Leadership Austin and their partners in launching Mobility ATX. In fact, I look forward to working with them and using the feedback they collect to inform our next steps on this issue.

Likewise, we'll be engaging in deeper conversations with our partners in the coming weeks. That includes Capital Metro, Central Texas Regional Mobility Authority (CTRMA), Texas Department of Transportation (TxDOT), Capital Area Metropolitan Planning Organization (CAMPO), Lone Star Rail, and Travis County. We can only be successful if we're all aligned to a long-term vision, and we're committed to taking immediate steps to integrate our efforts and test potential solutions.

Finally, as I stated earlier, there are several initiatives included in the Traffic Congestion Action Plan that will require your policy direction. By including these in the plan, I hope to help launch the discussion and will be bringing these issues forward to the Mobility Committee and then subsequently to the full Council.

I look forward to continuing discussion in the community with Council as we all try to tackle this challenge.

If you have any questions, please feel free to contact me.

# Traffic Congestion Action Plan

**GOAL: Reduce congestion using a variety of tools (short term methods coupled with a mid-long term strategy).**

## **IMPROVE TRAFFIC SYSTEM OPERATIONS –**

**Reduce congestion by ensuring that traffic flows as smoothly as possible within the existing roadway network and traffic signal system.**

### **1. TRAFFIC MANAGEMENT – Traffic Management Center**

Austin's Transportation system consists of a network of roadways, sidewalks, bike lanes, transit lines. The system is interconnected and controlled with a myriad of traffic control devices (most arterials are managed via traffic signals). Austin's Traffic Management Center (TMC) functions as the brain for Austin's Advancement Traffic Management System (see below) which facilitates traffic operations throughout the Downtown core and beyond. It is the facility where engineers and technicians can actively monitor Austin's mobility and traffic flow and respond to issues such as malfunctions, traffic emergencies, unexpected congestion, traffic incidents, etc. The TMC is equipped with monitors to view the 180 strategically placed traffic cameras in order to review real-time conditions on Austin's major arterials and in the Downtown Central Business District. Additionally, more than 600 of Austin's 1,011 traffic signals were recently upgraded to work efficiently with Austin's Advanced Traffic Management System (ATMS) so that the signals can be remotely timed, instead of requiring a field visit. By monitoring traffic cameras and signal systems in a single operation center, staff can maximize the efficiency of existing roadways and better respond to system abnormalities such as accidents, inclement weather and special events. Signal operations can also be coordinated with Austin Police Department personnel in the field to address critical traffic congestion needs such as intersection and lane blockages. Operating the TMC at its **full capability** will ensure that the existing transportation system functions at peak efficiency. **We need to implement short, mid, and long term changes in how we operate the TMC to minimize traffic congestion.**

#### **Immediate Actions:**

- ✓ Deploy a dedicated Traffic Mobility Unit using Police Officers located at key intersections to keep traffic flowing. Staff in the field, located at these key intersections, will coordinate through the City's Traffic Management Center (TMC) to ensure the "system" is working efficiently. Austin Police Department will station a police officer with command capability in the TMC focused on mobility and connected to on-street police. A pilot program will be launched using Police Officers for the "Traffic Mobility Unit" while evaluating the permanent staffing solution.
- ✓ Activate the Traffic Management Center (TMC) with existing staff to provide limited coverage of both the AM and PM peak periods and peak event/commuter activities (6 a.m. to 8 p.m. weekdays, special events, and weekends as necessary). Austin Transportation has shifted 3 employees to TMC for greater coverage. New engineering hires and existing traffic engineers will be assigned to assist in the TMC on a rotating basis to further expand its capability. Existing staffing can only provide limited improvements. Increasing staffing plan will accelerate improvement plan.
- ✓ Implement a "Don't Block the Box" education effort with Downtown building owners, commuters, and the public at large. See: [http://www.barrypopik.com/index.php/new\\_york\\_city/entry/dont\\_block\\_the\\_box/](http://www.barrypopik.com/index.php/new_york_city/entry/dont_block_the_box/) for information on the New York City "Don't Block the Box" public education campaign.

#### **Mid-term Actions:**

- Accelerate operational staffing plan to fully implement Austin's Advanced Traffic Management System (ATMS) and smart signals. The ATMS consists of:
  - Central software – this software is the "brain" of the system. The central software is where the transportation management strategies reside. Example strategies include: adaptive signal control to better respond to changing traffic volumes; coordinated signal timing plans; incident management;

transit signal priority for buses; emergency vehicle preemption to improve safety and reduce emergency response times; and procedures to identify when signals are on flash and detection is broken.

- Communications network – the network primarily consists of fiber optic lines that connect the central software to field equipment. Communications is essential for operators to know how traffic is flowing and to implement strategies aimed at reducing congestion.
- Field equipment – this is the equipment deployed in the field to monitor and manage traffic flow (e.g., vehicle detection, cameras, travel time sensors, sensors on field equipment to know when the equipment fails).

The ATMS allows real-time signal timing adjustments to facilitate differing traffic conditions. This system is extremely powerful, but ATD staff are only now learning and implementing its capabilities. Many Traffic Management Centers across the country operate via consultant contracts. A two- to three-year contract would allow the consultant to provide **immediate expertise and additional personnel** allowing Austin Transportation to accelerate the benefits of Austin's recently installed Advanced Traffic Management System; and then evaluate option to either hire staff internally or pursue a long-term operations contract.

**Benefits:**

- 24/7 Active operation of Traffic Management Center.
  - Real-time incident management (with APD authority – remote authorization for towing, incident response dispatch, obstruction removal, etc.).
  - Real-time corridor management (corridor flush plans, event evacuation, etc.).
  - Timing plan development for mobility improvements.
  - Re-timing plans to accommodate lane closures where allowed.
- Through technology, connect the Austin Police Department (APD) Dispatch Center with the Austin Transportation Department (ATD) and TxDOT Traffic Management Centers (TMCs). This action is an early predecessor to full regional integration of traffic management capabilities at the regional level.
- Accelerate the City's way-finding project in Downtown and expand advanced way-finding within critical travel corridors to improve travelers' access to our region's major roadways and transit assets such as Interstate 35, MoPac/Loop 1, Capital Metro park-and-rides and rail stations

**Longer-term Actions:**

- The City's newly operational Advanced Traffic Management System (ATMS) has been nationally recognized as one of the smartest new systems in the country, but we still need to do better. Completing the ATMS means fully implementing the planned upgrades to the system by continuing to deploy field equipment and operational planning. Investments will include expanded smart signals, additional signal controllers, expanded use of Bluetooth sensors to capture critical real-time traffic data, traffic volume counters, dynamic message signs, an expanded web portal and public communications system, and other technical elements to reach a state-of-the-art operation.

2. **REMOVING IMPEDIMENTS TO TRAFFIC FLOW** – Our Transportation network is constricted every day from a variety of obstacles in travel lanes. Minimizing these impediments will increase available capacity for mobility.

**Immediate Actions:**

- ✓ Actively enforce on-street delivery rules to avoid blocking traffic. Austin Police Department and Austin Transportation Parking Enforcement will partner to actively pursue delivery vehicles violating a new policy to keep the critical arterials open during peak commuting periods. Deliveries will be incentivized to shift delivery times outside the peak periods or to relocate to non-critical arterial cross-streets where possible.
- ✓ Reduce the impact of unnecessary traffic maneuvers on critical arterials. Actively limit mid-block left turns on critical arterials by encouraging alternative routes and by restricting movements where increased management will result in improved mobility.
- ✓ Halt or delay further public construction within the Right of Way (ROW) deemed not critical to other economic activities or not intended to immediately benefit mobility or safety within the affected area. Where possible, public construction in the right-of-way will occur during nighttime, weekend, and off-peak seasons.
- ✓ Reinforce the mandate that any closure of the Right of Way (ROW) must be coordinated through the Austin Transportation Department so that it can be communicated to our Traffic Management Center and receive proper scrutiny for its impact on mobility.
  - The Development Assistance Center will review demolition plans (lane closures) for mobility. Downtown Austin Project Coordination Zone (DAPCZ) lane closure notifications to TMC/ROW Management via 311 or other protocol prior to closures will be coordinated with signal operations.
- ✓ Deploy technology improvements at critical intersections to improve mobility - where *funding is currently available*. Funded Projects include:
  - Westbound Cesar Chavez Street at South Congress Avenue – deploy a dynamic southbound double left turn lane to reduce peak hour congestion.
  - Northbound South First Street at Cesar Chavez Street – consider and deploy if appropriate a dynamic left turn lane across the bridge and approaching the Guadalupe Street/Cesar Chavez Street intersection leg.
- ✓ Create and apply a 10 Percent Rule for long term public or private closures of critical arterials – the City will allow only one block face within a five-block area to be directly affected by a long-term closure at any given time for construction. Prohibit lane closures and deliveries (via enforcement) within the five-block affected area.
- ✓ Adopt a Critical Arterials Map and Operations Policy - This policy prioritizes mobility as the deciding factor in making decisions on **key arterials citywide**. The need for use of the ROW (Right of Way) for construction projects and special events would come second to the needs of mobility.

**Mid-term Actions:**

- Expand Core Activity Center Special Event Moratorium. Reduce number of event closures in the Downtown core by 20% by denying any new events and by proactively denying existing Downtown events. Deny closure of major Downtown streets (Congress Avenue Bridge, Congress Avenue, South First Street bridge, Lavaca, Guadalupe, Cesar Chavez, 5<sup>th</sup> and 6<sup>th</sup> Streets, 15<sup>th</sup> Street). Redirect events to areas outside of core. Limit the access to these events by single occupancy vehicle by 50-80%. Require a full park-and-ride plan for access to these events. Access by bike, pedestrian, and transit to be emphasized.

## PROVIDE (or free up) ADDITIONAL CAPACITY –

Reduce congestion by proving additional capacity or eliminating some existing traffic demand.

1. **CONSTRUCTING NEW INFRASTRUCTURE –** Our Transportation system is stressed. As more and more people come to Austin, our efforts to ensure our existing system works at capacity (see above) can only go so far. We will have to include every tool in the tool box, including building additional infrastructure. Austin must partner with regional transportation providers to add capacity.

### **Immediate Actions:**

- ✓ Deploy construction improvements at critical intersections to improve mobility - where *funding is currently available*. Funded Projects include:
  - Accelerate funding for the IH 35 at 51<sup>st</sup> Street Interchange project, assuring that both the northbound and southbound portions of the project are realized as quickly as possible.

### **Mid-term Actions:**

- Identify funding and implementation strategies to achieve the mobility visions established as part of our recent major corridor development plans in the **Lamar Boulevard, Burnet Lane, Riverside Drive, FM 969/MLK Boulevard, West Campus, and Airport Boulevard corridors**.
- Work with Mobility Committee and Council Members to continue the identification and development of corridor planning efforts for key corridors citywide such as:
  - **South Brodie Lane, Congress Avenue, 7<sup>th</sup> east of IH 35, Parmer Lane, Pleasant Valley/Todd Lane, William Cannon, Cesar Chavez, Central Lamar, Rundberg, Manchaca, William Cannon, 2222 (MoPac to 620), Parmer Lane, Howard Lane, Southwest Parkway, Spicewood Springs Blvd (360-MoPac)**
- Identify Funding to improve key intersections where mobility falters due to incomplete street grids and/or substandard intersection design. Partner with our regional transportation partners and jurisdictions to incrementally purchase Right-of-Way at key intersections required to realign offset grids. This will allow the City to identify and modify split phased signals and other inefficient intersections throughout Austin. **We have identified over 180 intersection projects throughout the City and are still adding to that list.**
- Address the requirement for new development within Austin to pay its fair share of needed transportation improvements. Shift the responsibility for development review of transportation issues to the Austin Transportation Department to assure that our development policies related to mobility are consistent with the City's transportation management and strategic mobility vision; including the use of *Transportation Impact Fee Analysis* and the application of an appropriate fee structure for new development.
- Support ongoing Transportation Projects:
  - The successful deployment of the joint City of Austin/TXDOT plan to remake the **Interstate 35 Corridor** through central Austin.
  - The completion and integration into our City's roadway network of the **MoPac North Express Lanes**, now under construction by the Central Texas Regional Mobility Authority.
  - The development of an environmentally compatible design for a **MoPac South Express Lane project** that demonstrates an ability to improve access to and from southwest Austin without overwhelming our Downtown street network and negatively affecting neighborhoods.
  - The development of a viable **Loop 360 mobility plan** that enhances the travel capacity on our City's western border, providing access not only to the neighborhoods within the corridor but also to the northwest portions of our growing region.
  - The construction of the **US 183 corridor** in east and north Austin to provide continuous access controlled facilities with express options from our far northwest all the way to our regional airport.
  - The completion of the interim improvements and planning for the long-term project for the **"Y" at Oak Hill**

### **Longer-term Actions:**

- Launch the start of a new Strategic Mobility Plan. The Austin Transportation Department has previously implemented 2010, 2012 and 2014 Strategic Mobility Plans. It is time to re-ignite a public process across the City of Austin to address mobility and **all transportation modes (roadway, pedestrian, bike, transit, etc.)**. This effort will include partnering with other regional transportation providers to make sure that Austin's vision for mobility aligns with regional plans (e.g. CAMPO 2040 Plan) and vice versa. With the City's Strategic Mobility Planning effort we can work to ensure that regional investments meet the environmental, community, and economic needs of the City of Austin. Services provided and new capacity planned for implementation by our partners must respect the integrity of our community. The Council Mobility Committee will begin this process by soliciting Council and public comment on transportation needs in April.
  
- 2. **PROVIDING TRANSPORTATION ALTERNATIVES –** As stated above, we will need every tool in the tool box to address our mobility challenges including reducing the number of vehicles on our roadways.

### **Immediate Actions:**

- ✓ Expedite Travel Demand Management (TDM) for City employees within the Core Activity Center. The City Manager directs a mandatory 20% off-set in travel (especially during peak hours) for all City employees within the Downtown core – by providing employees with alternative work schedule options, encouraging the use of alternative modes and teleworking. Directors will be held accountable for achieving a 20% off-set in single-occupancy vehicle trips during peak hours for their departments. As part of this effort, the City will accelerate the schedule for the roll out of the City's new Employee Parking Cash-Out Program that shifts the responsibility for choosing how to store a vehicle in the congested Downtown from the City as an employer to our employees within the central core. This program had been on a schedule to roll out in 2016 as a tax deferred benefit option for employees, but can be rolled out in advance with the City absorbing the federal tax liability as part of the early program.

### **Mid-term Actions:**

Work with Capital Metro to enhance transit routes as commuter options to and from the Downtown Core. We desire to partner with the region's transit providers to focus on individual stop placement on our critical arterials, the deployment of technologies and designs to improve the efficiency of transit services but not at the expense of other forms of mobility. We want to encourage the deployment of a *more robust system of park-and-ride commuter stations* – especially in the southern and eastern portions of our region; and the I-35, SH 71 and US 290 corridors where growth is poised to explode due to our region's strong economic growth.

Consider increasing on-street parking costs at pay stations. This measure would encourage more people to use commute alternatives into the core, and would provide greater parking turnover on streets – freeing up spaces so cars don't circle looking for spaces. Downtown utilization is approximately 85% capacity, which is considered to be full.